

February 12, 2019

VIA Email: Mike.Cizenski@scc.virginia.gov and Neil.Joshipura@scc.virginia.gov

RE: ODEC Comments on draft SCC Regulations Governing Interconnection of Small **Electrical Generators**

Dear Timothy R. Faherty,

Thank you for including Old Dominion Electric Cooperative in your request for comments on the draft chances to the SCC Regulations Governing Interconnection of Small Electrical Generators. We have reviewed the draft changes. Our comments are as follows.

20VAC5-314-10

Insert a definition of how the size of the facility is to be determined for all Levels. For example, the size of the SGF shall be determined by the summation of the nameplate data for all inverters at unity power factor."

20VAC5-314-20. Definitions Add the following underlined wording to the definitions:

Interconnection studies: ...means the studies conducted by the utility, an Affected system operator, and/or...

Interdependent Customer: ...as determined by the utility or the Affected system operator.

Material modification: ...of any interconnection request with a higher queue number or could change the results of studies performed by the utility or the Affected system operator. This could include changes to equipment or size of the project.

Network upgrades: ... means additions, modifications, and enhancements to the utility's transmission system or an Affected system that are required

Operating requirements means any operating and technical requirements that may be applicable due to regional transmission entity, independent system operator, control area, Affected system, or the utility's requirements

"Point of interconnection" means the point where the customer's interconnection facilities physically and electrically connect to the utility's system.









20VAC5-314-35. Pre-Application. Add the following underlined wording:

Paragraph A: ... interconnection studies from other IC's, and other materials useful to providing an understanding of an interconnection at a particular point on the utility's distribution or transmission System, to the extent such provision does not violate confidentiality...

Paragraph C: Using the information provided in the pre-application report request form in 20VAC5-314-35 B, the utility will suggest a substation/area bus, bank or circuit that could possibly serve the proposed point of interconnection. This selection by the utility does not necessarily indicate, after application of the screens and/or study, that this point of interconnection will be suitable or the most cost effective for interconnection. The IC must request additional pre-application reports if information about multiple Points of Interconnection is requested. Subject to 20VAC5-314-35 D, the pre-application report will include the following information

Paragraph C. 4. ... and aggregate lower queued generation capacity).

20VAC5-314-40. Level 1 interconnection process.

Comment: Site Control Information: the information pertaining to site control should apply to Levels 1, 2, and 3. Therefore it should be relocated to a section where it applies to all levels.

Paragraph D. Add the following wording:

An address that has been issued conforming to the 911 emergency response group for the area must be provided with the site control information. The site controlled must be large enough to accommodate the proposed project. Generally, 5 acres is required per 1MW of solar capacity unless the IC can reasonably demonstrate that the proposed generation can be installed on the site. Site control may be demonstrated through:

Paragraph E. 4. and 5. Add the following underlined wording:

Insert: ...has had the settings certified by a consultant or manufacturer knowledgeable in such settings and has provided the settings to the utility with an opportunity to review;

The utility is not trained in each and every new piece of equipment that could be installed by the IC. It should therefore be contingent on the IC to have the settings verified by someone familiar with this equipment with the utility reviewing the settings.

Paragraph E. 7. E. Add the following underlined wording:

Voltage Balance limitation. ...The SGF shall not create phase voltage imbalances of more than 3.0% measured from phase to phase or phase to ground at any other customer's revenue meter...

Comment: Wholesale Market Participation Agreement (WMPA) with PJM

There should be some guidance regarding coordination for ICs that are using these regulations for the physical interconnection but the IC is also going through the PJM Interconnection Process to obtain a Wholesale Market Participation Agreement (WMPA). Many Level 3 and some Level 2 ICs may do this in order to have a way to sell









their energy. However the PJM process takes 2.5 years from the start of a queue cycle. The timelines specified for studies and construction do not correspond to the PJM timeline. Depending on when the PJM process is started, the upgrade costs from PJM will not be available to be included in the facilities study under the SCC process. Additionally, the IC may be required to make payments or start construction prior to having finished the PJM process.

20VAC5-314-60. Level 2 interconnection process.

Paragraph C. 5 Add the following <u>underlined</u> wording: If the SGF is to be interconnected to a single-phase shared secondary,

Comment: A definition of shared secondary is required. If the aggregate generation is limited to 20kW then it should be referred back to the Level 1 process.

Paragraph C. Add as section 9.

9. In locations where the distribution utility facilities directly connect to another utility or the substation directly connects to another Transmission Owner's facilities or the SGF exceeds 33% of the lightest loading on the substation or distribution delivery point, the Transmission Owner shall be included in evaluating the SGF as an Affected System. The timeline for performing the screen shall be increased to 30 days when an Affected System needs to be included.

Paragraph G. Add the following <u>underlined</u> wording:

If the interconnection fails any screen and the utility <u>or Affected System</u> determines that the interconnection cannot be approved without (i) minor modifications at minimal cost...

- ... At the time of notification of the utility's determination, or at the customer options meeting, the utility <u>and</u> <u>Affected System</u> shall...
- ... Within 30 business days following receipt of the supplemental review agreement and deposit, the utility <u>and Affected Systems if any</u>,...

20VAC5-314-70. Level 3 interconnection process.

Paragraph B. Add the following underlined wording:

Affected systems shall be included in the scoping meeting.

Paragraph C.4 (a) Add the following <u>underlined</u> wording:







Study costs shall be the utility's and Affected System's actual incremental costs

Paragraph C.7. Add paragraph (d):

d. Initial review of communication facilities available for transfer trip and other protective purposes; and

Paragraph C.9 Add the following underlined wording:

The feasibility study shall include a determination of the feasibility of all potential points of interconnection for a SGF at the specified site...

Paragraph D. 3. (a) Add the following <u>underlined</u> wording:

a. Study cost shall be the utility's and Affected System's actual incremental costs...

Paragraph D. 5. Add to the end of the paragraph

If the site for the SGF changes, a new application is required.

Paragraph D. 6. Add the following <u>underlined</u> wording:

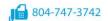
A system impact study shall consist of a study of the potentially impacted transmission and distribution systems, a short circuit analysis, a stability analysis, a power flow analysis, voltage drop and flicker studies, grounding reviews, distribution load flow study, analysis of equipment interrupting ratings, protection coordination study, communications study, and impacts on electric system operation, as necessary.

If arranged with the utility prior to the utility preparing the system impact study agreement, the system impact study may, at the IC's cost, include one or more alternatives to the point of interconnection; however, such alternative points must be on the same distribution circuit as the point of interconnection the IC specified as the proposed point of interconnection and the SGF must be at the same site.

Paragraph E. 6. Comment:

In order to group facilities the studies will also need to be grouped. For Level 2 & 3 projects it would be more efficient to have a due date for applications, such as every 6 months, so that they can go through the studies and construction process concurrently. The projects would be grouped by substation. Otherwise another SGF







connecting in the same area may come in after the study start dates specified herein and the utility can't meet

the requirements for studying the facilities of the next SGF until the first SGF's study is completed.

Paragraph F. Comment:

The SGIA must have a sunset provision. If the developer has not started construction of the SGF. The timeline

needs to be long enough to allow completion of the PJM WMPA process but no longer than 5 years from the

date the SGIA is transmitted to the IC. Additionally, if the WMPA is terminated, the SGIA should automatically

follow suit and be terminated.

20VAC5-314-80. Interconnection metering.

Comment: If the SGF is selling its power through the PJM market and is being studied in the PJM queue for a

Wholesale Market Participant Agreement (WMPA), the SGF must meet PJM's meeting requirement and those

requirements must take precedence.

20VAC5-314-150. Capacity of the small generating facility.

Paragraph B. Add the following <u>underlined</u> wording:

If the interconnection request is for a SGF that includes multiple energy production or storage devices at a site...

ODEC is available to review these comments with the Department of Public Utility Regulation and plans to

attend the working group meetings on this topic.

If you have any question, please contact me at bpezalla@odec.com or 804-290-2193.

Sincerely,

William Pezalla

Director of Transmission Services





